

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000045**Date Inspected:** 04-Dec-2006**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Liu**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** N/A**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright observed quality control functions related to procedure qualification (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Item	Description	WBS	Dwg No.	Status
1				

The QC Inspector stated the Radiographic Testing (RT) film for 1G (horizontal) Gas Metal Arc Welding (GMAW) Procedure Qualification (PQR) identified as HP-2006119-1 was rejected by QC. The QA Inspector has not reviewed the film.

The QA Inspector observed welding of a Procedure Qualification (PQR) test plate identified as HP-2006107-2. The test was conducted using Flux Cored Arc Welding (FCAW), Hyundai Supercored 71H, electrode in the 1G (flat) position to AWS D1.5, Section 5.12.1 (Maximum Heat Input). The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using an Amprobe® amperage / voltage meter and a stopwatch. The welding appeared to comply with the contract documents. The Caltrans Quality Assurance Inspector Mr. Dave McClary completed TL-6032 for this test.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

The QC Inspector with ZPMC Quality Control (QC) stated the RT film for PQR HP-2006119-1 failed RT testing and informed QA that the test would be re-welded.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659,, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Wright,Mark	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary,David	QA Reviewer

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